Amirmohammad Marshalpirgheybi

Email: amirmohammadmarshalpirgheybi@gmail.com
LinkedIn: Amir-Marsahl
GitHub: github.com/marshalpirgheybi

EDUCATION

Sharif University of Technology   Tehran, Iran
B.S. in Electrical Engineering, GPA: 19.42/20.00   2019–2023
− Ranked 4th among 164 EE students

Shahid Datgheib Highshcool   Shiraz, Iran
Diploma in Mathematics and Physics, GPA: 19.50/20.00   2016–2019

SKILLS

- **Programming Languages:** Python, C, C++, Java, MATLAB, Assembly, Pytorch, Linux
- **Electrical Engineering Software:** PSpice, COMSOL, Proteus, Xilinx ISE
- **Interpersonal Skills:** Teamwork, Mentoring, Teaching, Self-Taught

LANGUAGES

- **Persian:** Native
- **English:** Fluent
  TOEFl iBT Score: 101   **Reading:** 22
  Listening: 29   **Speaking:** 25   **Writing:** 25
- **Russian:** Familiar

RESEARCH INTEREST

- **Statistical Learning Theory**
- **Optimization**
- **High Dimensional Statistics**
- **Information Theory**
- **Queueing Network**

SCHOLARSHIPS AND AWARDS

- Awarded Gold Medal of National Olympiad on Astrophysics and Astronomy   2018
- Awarded Silver Medal of International Olympiad on Astrophysics and Astronomy   2019

TEACHING ASSISTANT EXPERIENCE

- **Teaching Assistant** at Sharif University of Technology   Spring 2023
  Convex Optimization 1
  − Head TA

- **Teaching Assistant** at Sharif University of Technology   Fall 2022
  Introduction to Machine Learning
  − Designing the Final Project

- **Teaching Assistant** at Sharif University of Technology   Fall 2022
  Probability and Statistics
  − Designing the Final Project

SELECTED COURSES

Graph Signal Processing   In Progress, Dr. Amini

Big Data   In Progress, Dr. Gholampour

High Dimensional Statistics	19.8/20, Dr. Yasayee
Information Thoery, Statistics and Learning	19.4/20, Dr. Yasayee
Introduction to Machine Learning	20/20, Dr. Amini
Convex Optimization 1	20/20, Dr. Yasayee
Mathematical Methods in Engineering (Linear Algebra)	20/20, Dr. Amini
Object Oriented Programming	20/20, Dr. Hashemi

SELECTED PROJECTS

Analyzing and Balancing Data for Persian GPT
Dr. Ghodsi   In Progress ...
- Preparing dataset for pretraining the GPT model
- Designing RLHF interface for training
- Analyzing statistics of the dataset

Studying and Analysing Transport Inequalities and their Application
High Dimensional Statistics, Dr. Yassaee   Spring 2023
- Studying the optimal transport problem
- Reviewing applications of optimal transport in concentration inequalities

Studying Algorithmic Game Theory and its Applications
Information Theory and Statistics for Learning, Dr. Yassaee   Fall 2022

Image Denoising Using EM Algorithm and Autoencoders
Introduction to Machine Learning, Dr. Amini   Spring 2023
- Using EM algorithm to denoise sample images
- Using autoencoders for different image processing applications such as image denoising

Developoing Recommender Systems Using Machine Learning Models
Machine Learning, Dr. Amini   Fall 2022